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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *19 September 2007*.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-53* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-53* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in responsive to the amendment filed on September 19, 2007. Claims 1-

53 are pending and have been considered below.

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

3.   Claim 1 recites the limitation "the positions" in line 10. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

5.   Claim 1-4, 6, 7, 11, 15, 16, 18, 24, 25, 29, 31-33, 35, 37, 38, 43-45, 47, 48 and

53 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Eudora</u> (Eudora® Email,

User Manual for Windows, Version 5.1, Copyright (c) 2001 by Qualcomm Inc.)

Claim 1, 32, 44: <u>Eudora</u> discloses a computer program product tangibly embodied on an information carrier, the product comprising instructions operable to cause data processing apparatus to:

    a. display a table of data as an element of a graphical user interface display (pg. 132), display including a set of markers (pg. 132: "Date", "Subject" headers), each marker being associated with a row of the table or each marker being associated with a column of the table, the table of data having two or more sort keys (pg. 132: "1", "2" triangles) having a sort key order (pg. 132: "Complex Sorting") including a most significant sort key (pg. 132: "2" sort key, "Date"), each sort key being a row or each sort key being a column of the table (pg. 132, column), each sort key having a sort direction (pg. 132: ascending / descending);

    b. receive from the user an input gesture selecting a marker (pg. 132: "Ctrl key and click one column");

    c. establish the row or column associated with the user-selected marker as the most significant sort key (pg. 132, "Date"), and maintain the positions and sort directions of the remaining sort keys in the sort key order (pg. 132, see Figure);

    d. sort the table of data according to the two or more sort keys, the sort key order, and the sort key directions in response to the input gesture (pg. 132, see Figure); and

    e. display the sorted data (pg. 132, see Figure).

Claim 2, 33: <u>Eudora</u> discloses the product of claim 1, wherein the user input gesture is

a selecting gesture for selecting the marker (pg. 132: "Complex Sorting".)

Claim 3: <u>Eudora</u> discloses the product of claim 1, wherein the user input gesture

comprises a pointing device action on the marker (pg. 132: clicking.)

Claim 4: <u>Eudora</u> discloses the product of claim 1, wherein the user input gesture is a

mouse click on the marker (pg. 132: clicking.)

Claim 6, 35, 45: <u>Eudora</u> discloses the product of claim 1, further comprising instructions

to: represent the sort key order visually in the table by displaying the markers with a

pattern of distinct visual properties (pg 132, "1", "2" numerals.)

Claim 7, 25: <u>Eudora</u> discloses the product of claim 6, wherein the pattern of distinct

visual properties indicates the sort key order (pg 132, "1", "2" numerals.)

Claim 11, 37, 47: <u>Eudora</u> discloses the product of claim 1, further comprising

instructions to: determine whether the user-selected marker is associated with the most

significant key, and if so, change a sort direction of the most significant key, and

otherwise establish the row or column associated with the user-selected marker as the

most significant sort key, and maintain the positions and the sort directions of the

remaining sort keys in the sort key order (pg. 105, clicking on the up arrow changes it

from ascending to descending.)

Claim 15: <u>Eudora</u> discloses the product of claim 1, wherein the number of sort keys for

the table of data is limited to a predetermined number greater than one (e.g. two, pg.

132.)

Claim 18: <u>Eudora</u> discloses the product of claim 1, wherein the marker is a column

header (pg.132.)

Claim 16, 38, 48: <u>Eudora</u> discloses the product of claim 15, wherein the table of data

has one or more sort keys having a sort key order including a most significant sort key

and a least significant sort key the product further comprising instructions to: determine

whether the table of data has the predetermined number (i.e. two, pg. 132) of sort keys,

and if so, remove the least significant sort key from the sort key order (canceling sorts,

pg. 132), establish the row or column associated with the user-selected marker as the

most significant sort key (pg. 132, "Date"), and maintain the positions and the sort

directions of the remaining sort keys in the sort key order (pg. 132, Figure), and

otherwise (in different circumstances, or in the alternative, i.e. the table of data does not

have a predetermined number of sort keys) establish the row or column associated with

the user-selected marker as the most significant sort key (pg. 132, "Date"), and maintain

the positions and the sort directions of the remaining sort keys in the sort key order (pg.

132, see Figure.)

Claim 24, 43, 53: <u>Eudora</u> discloses a computer program product tangibly embodied on

an information carrier for interacting with a user, the product comprising instructions

operable to cause data processing apparatus to: represent visually a sort key order for a

table of data by displaying on a graphical user interface display two or more markers

with a pattern of distinct visual properties (pg. 132, Figure.)

Claim 29: <u>Eudora</u> discloses the product of claim 24, wherein each marker is associated

with a row or each marker is associated with a column of the table of data (pg. 132,

Figure.)

Claim 31: <u>Eudora</u> discloses the product of claim 24, wherein each marker is a column

header (pg. 132, Figure.)

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 5, 19 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora.

Claim 5: Eudora discloses the product of claim 1. Eudora shows the use of a single click to as user input gesture. Eudora does not explicitly disclose wherein the user input gesture is a double mouse click on the marker. However, it is old and well known in the computing art to use a double click in lieu of a single click for selection. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a double click. One would have been motivated to use a double click method of selection so as to meet the expectations of Window OS users.

Claim 19, 30: Eudora discloses the product of claim 1. However Eudora does not explicitly disclose wherein the marker is a row header. Examiner notes, that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the marker as a row header (as opposed to a column header as disclosed in Eudora), since it has been held that rearranging parts (from column to row) of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

8.   Claims 8, 9, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora in view of Lane et al., (5,704,051.)

Claim 8, 9, 26, 27: <u>Eudora</u> discloses the product of claim 6. However, Eudora does not

explicitly disclose wherein the pattern of distinct visual properties comprises a set of

distinct colors. <u>Lane</u> discloses a graphical user interface including color coding using a

pattern of distinct visuals properties comprising a set of distinct colors (5:57-61.)

Therefore it would have been obvious to one having ordinary skill in the art at the time

the invention was made to use a well known technique of color coding patterns to

improve similar graphical user interfaces of <u>Lane</u> and <u>Eudora</u> in the same manner to

yield a predictable result of a graphical user interface that utilize color in a meaningful

way to readily convey useful information to the user, as suggested in <u>Lane</u>.

9.   Claims 10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eudora view of <u>Adelson</u> et al., (5,006,722.)

Claim 10, 28: <u>Eudora</u> discloses the product of claim 6. However, <u>Eudora</u> does not

explicitly disclose wherein the pattern of distinct visual properties comprises a set of

distinct non-textual representations of the sort key order. <u>Adelson</u> discloses a means for

color coding information so as to indicate different levels. Therefore it would have been

obvious to one having ordinary skill in the art at the time the invention was made to use

a well known technique of color coding information so as to indicated different sort

orders, as taught in <u>Eudora,</u> to improve the graphical user interfaces of <u>Adelson</u> and

<u>Eudora</u> and yield a predictable result of a graphical user interface that utilizes color in a

meaningful way to readily convey useful information to the user, as suggested in

Adelson.

10.   Claims 12, 13, 20, 34, 39 and 49 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eudora in view of Davies et al., (5,586,311.)

Claim 12, 20, 34, 39, 49: Eudora discloses the product of claim 1. However, Eudora

does not explicitly disclose wherein the user input gesture is a dragging gesture for

selecting the marker by dragging the marker to an area on the graphical user interface

display. Davies discloses a graphical user interface for data access and analysis,

including user input gesture for drag and dropping a sort criteria object unto an icon

and/or icon area (5:8-21). Therefore, it would have been obvious to one having ordinary

skill in the art at the time the invention was made to combine Davies' teaching of using a

drag and drop gesture with the disclosure of Eudora so as to provide a drag and drop

means to specify a sort order. One would have been motivated to use a drag and drop

means so as to provide an alternative way to do sort order, as suggested by Davies.

Claim 13: Eudora discloses the product of claim 12. Davies further discloses wherein

the area on the graphical user interface display comprises an icon (Fig. 3: 92.)

11.   Claims 21, 40 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eudora in view of Davies., and in further view of MacGregor (5,396,621.)

Claim 21, 40, 50: Eudora and Davies disclose the product of claim 20. However, does

not disclose wherein the area of the graphical user interface display is an icon, the

product further comprising instructions to:

   a. receive from the user an input gesture selecting the icon, the icon being

      associated with a separate sort key list window; and

   b. display, in the separate sort key list window on the graphical user interface

      display, a list of sort keys comprising the one or more sort keys for the table of

      data having a sort key order including the most significant sort key.

MacGregor discloses a similar product for sorting information, comprising instructions

to:

   a. receive from the user an input gesture selecting the icon, the icon being

      associated with a separate sort key list window (Fig. 6(a): 602); and

   b. display, in the separate sort key list window on the graphical user interface

      display, a list of sort keys comprising the one or more sort keys for the table of

      data having a sort key order including the most significant sort key (Fig. 6(b)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to combine the separately displayed sort key list window as

taught by MacGregor to the teachings of Eudora and Davies as it was a known

technique to use separate windows for detailed configurations to improve similar

products such as MacGregor and Eudora in the same fashion to obtain a predictable

result.

12.   Claims 14, 22, 41 and 51 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Eudora</u> in view of <u>Davies</u> and in further view of <u>Liu</u> et al., (5,706,449.)

Claim 14: <u>Eudora</u> and <u>Davies</u> disclose the product of claim 12. However, <u>Eudora</u> and

<u>Davies</u> do not explicitly disclose wherein the area on the graphical user interface display

comprises a sort key list window. <u>Liu</u> discloses a similar product for a user to efficiently

specify multiple sort criteria, including a sort key window (Fig. 10: 38.) Therefore, it

would have been obvious to combine <u>Liu's</u> teaching of a sort key window with the

disclosures of <u>Eudora</u> and <u>Davies</u> for dragging and dropping sort criteria markers. One

would have been motivated to drag and drop markers to a sort key list window so as to

provide an alternative way to do sort order, as suggested in <u>Davies</u>.

Claim 22, 41, 51: <u>Eudora</u> and <u>Davies</u> disclose the product of claim 20. However,

<u>Eudora</u> and <u>Davies</u> do not explicitly disclose wherein the area of the graphical user

interface display is a separate sort key list window, further comprising instructions to:

    a. display in the separate sort key list window, a list of sort keys comprising the one

        or more sort keys for the table of data having a sort key order including the most

        significant sort key.

<u>Liu</u> discloses a similar product for a user to efficiently specify multiple sort criteria,

including a sort key list window (Fig. 10: 38) further comprising instructions to:

a. display in the separate sort key list window, a list of sort keys comprising the one

or more sort keys for the table of data having a sort key order including the most

significant sort key (Fig. 12: 38.)

Therefore, it would have been obvious to combine Liu's teaching of a sort key window

with the disclosures of Eudora and Davies for dragging and dropping sort criteria

markers. One would have been motivated to drag and drop markers to a sort key list

window so as to provide an alternative way to do sort order, as suggested in Davies.

13.   Claims 17, 36 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eudora in view of Liu.

Claim 17, 36, 46: Eudora discloses the product of claim 1. However, Eudora does not

explicitly disclose further comprising instructions to: receive from the user an input

gesture deselecting a marker associated with a sort key; and remove the sort key

associated with the deselected marker from the sort key order while maintaining the

positions and the sort directions of the remaining sort keys in the sort key order. Liu

discloses a similar product for a user to efficiently specify multiple sort criteria,

comprising instructions to:

a. receive from the user an input gesture deselecting a marker associated with a

sort key (Fig. 13; 6:6-21); and

    b. remove the sort key associated with the deselected marker from the sort key

        order while maintaining the positions and the sort directions of the remaining sort

        keys in the sort key order (Fig. 13, 14; 6:6-21.)

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made combine the teaching of Liu to Eudora. One would have been

motivated to deselect and maintain the positions of remaining sort keys as it was a

known technique to improve similar devices in the same way to yield a predictable

result.

14.   Claims 23, 42 and 52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eudora in view of Davies and in further view of MacGregor

(5,396,621.)

Claim 23, 42, 52: Eudora discloses a computer program product tangibly embodied on

an information carrier for interacting with a user, the product comprising instructions

operable to cause data processing apparatus to:

    a. display a table of data as an element of a graphical user interface display (pg.

        132), display including a set of markers (pg. 132: "Date", "Subject" headers),

        each marker being associated with a row of the table or each marker being

        associated with a column of the table, the table of data having one or more sort

        keys (pg. 132: "1", "2" triangles) having a sort key order (pg. 132: "Complex

        Sorting") including a most significant sort key (pg. 132: "2" sort key, "Date"), each

sort key being a row or each sort key being a column of the table (pg. 132,

column), each sort key having a sort direction (pg. 132: ascending / descending);

b. maintain the positions and sort directions of the remaining sort keys in the sort

key order (pg. 132, see Figure);

c. sort the table of data according to the two or more sort keys, the sort key order,

and the sort key directions in response to the input gesture (pg. 132, see Figure);

and

d. display the sorted data (pg. 132, see Figure).

However, Eudora does not explicitly disclose wherein the user input gesture is a

dragging gesture for selecting the marker by dragging the marker to an area on the

graphical user interface display. Davies discloses a graphical user interface for data

access and analysis, including user input gesture for drag and dropping a sort criteria

object unto an icon and/or icon area (5:8-21). Therefore, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to combine

Davies' teaching of using a drag and drop gesture with the disclosure of Eudora so as to

provide a drag and drop means to specify a sort order. One would have been motivated

to use a drag and drop means so as to provide an alternative way to do a sort order, as

suggested by Davies.

Eudora does not explicitly disclose establishing the row or column associated with

the user-selected marker as a sort key having a position in the sort key order defined by

the location within the area. MacGregor discloses a sorting of information in a

computerized spreadsheet or the like, including establishing a row or a column

associated with a user-selected marker as a sort key having a position in the sort key

order defined by the location within the area (Fig. 6(b).) Therefore it would have been

obvious to one having ordinary skill in the art at the time the invention was made to

combine the teaching of <u>MacGregor</u>, having a numbered sort key order list, with the

teaching of Eudora and Davies, so as to provide for establishing of a row or column to

be associated with a user-selected marker (<u>Eudora</u>) as a result of by drag and dropping

it (as disclosed in <u>Davies</u>) to a location within the area. One would have been motivated

to combine the teachings of <u>MacGregor</u> to <u>Eudora</u> and <u>Davies</u> so as to provide a readily

readable list of sort keys in a sort order, as suggested by <u>MacGregor</u>.

Response to Arguments

15.   Applicant's arguments with respect to claim 1-53 have been considered but are

moot in view of the new ground(s) of rejection.

16.   Examiner's rejection in the Outstanding Office Action based on 35 USC 112 is

withdrawn, and confirms the new oath or declaration filed by the Applicant identifying

the citizenship of one of the inventors.

Conclusion

17.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

18.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andrew Belousov whose telephone number is (571)

270-1695. The examiner can normally be reached on Mon-Fri (alternate Fri off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB
December 6, 2007

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174